

## REMARKS

Claims 1-17 remain for further consideration.

The rejections shall be taken up in the order presented in the Official Action.

1. Entry of the IDS filed August 1, 2003 is noted and appreciated.
- 2-3. Claims 1-17 currently stand rejected for allegedly being obvious in view of the combined subject matter disclosed in U.S. Patent 6,366,927 to Meek et al (hereinafter "Meek"), U.S. Patent 6,366,851 to Chojnacki (hereinafter "Chojnacki") and U.S. Patent 6,438,494 to Yamamoto (hereinafter "Yamamoto").

Claim 1 recites a vehicle navigation system that receives sensor data from a plurality of sensors, and provides a map image that is presented on a display. The navigation system includes *"a navigation map data memory that includes map data indicative of roadways stored in Cornu spiral form".* (emphasis added, cl. 1).

Meeks discloses a method and system for representation and use of shape information in geographic databases. Meeks simply discloses a Bezier curve. The Official Action recognizes that Meeks fails to disclose a Cornu spiral (see Official Action, pg. 2). The Official Action contends that *"...it is obvious that geographic features that are other than straight form can include clothoids curves as disclosed[d] in Chojnacki et al. (column 27, lines 44-55). Also, as disclose[d] in Yamamoto et al., a clothoid curve is a spiral form (column 1, lines 22-23)."* (Official Action, pgs. 2-3). The Official Action then concludes *"[t]herefore, it is obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Meek et al by combining geographic features that are other than straight form can include different type of*

road form such as cornu spiral form for accurately store a curvature transition curves of geographic feature as river and curve roads, thereby resulting in further reduction in data storage requirement.” (emphasis added, Official Action, pg. 3). It is respectfully submitted that this rejection is improper.

The Official Action contends that a skilled person would have been motivated to combine Weeks, Chojnacki and Yamamoto since this would result “...*in further reduction in data storage requirement.*” (Official Action, pg. 3). However, there is no teaching or suggestion in the cited art that using a Cornu spiral rather than a Bezier spiral would reduce the data storage requirement. That is, there is no reasoned statement in the Official Action suitable to establish a prima facie case of obviousness. The conclusionary logic in the Official Action that storing data in Cornu spiral form rather than Bezier spiral form reduces the data storage requirement is not supported by any reasoned statement, and the undersigned will not take judicial notice of the expansive technical gap that the Official Action attempts to span with this unsupported contention.

The conclusionary rationale set forth in the Official Action is incapable of establishing a prima facie case of obviousness. “*Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching suggestion or incentive supporting the combination.*” In re Geiger, 2 U.S.P.Q.2d 1276, 1278 (Fed. Cir. 1987). “*Although the Commissioner suggests that [the structure in the primary prior art reference] could readily be modified to form the [claimed] structure, [t]he mere fact that the prior art could be so modified would not have made the modification obvious unless the prior art suggested the desirability of the modification.*” In re Laskowski, 10 U.S.P.Q.2d 1397, 1398 (Fed. Cir. 1989), citing In re Gordon, 221 U.S.P.Q. 1125, 1127 (Fed. Cir. 1984). In addition,

*"[w]hen the incentive to combine the teachings of the references is not readily apparent, it is the duty of the examiner to explain why the combination of the reference teachings is proper."* Ex parte Stone, 2 U.S.P.Q.2d 1788, 1790 (Bd.App. & Int'f 1986) (emphasis added).

As noted above, it is fundamental that obviousness can not be established absent some teaching to combine the references, or a suggestion or incentive supporting the combination of references. See In re Geiger, at 1278 (Fed. Cir. 1987). In the instant case the Official Action is lacking the necessary factual, non-conclusionary explanation why the combination of the Meeks, Chojnacki and Yamamoto is proper. Hence, it is respectfully submitted that a prima facie case of obviousness has not been presented since there is no proper teaching, suggestion or incentive that would lead one of ordinary skill in the art to modify Meeks based upon the teachings of Chojnacki and Yamamoto to create the claimed invention.

Reconsideration and allowance of claims 1-17 is respectfully requested.

If a telephone interview could assist in the prosecution of this application, please call the undersigned attorney.

Respectfully submitted,



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